

Having thus described the preferred embodiments, the invention is now claimed to be:

1 **1.** A user interface method for executing one or more operations in a
2 computer for interfacing an associated user with a knowledge portal that is operatively
3 associated with a plurality of data objects, the user interface method comprising the steps
4 of:

5 receiving a user input;
6 updating, based upon the received user input, at least one of a current object
7 identity, a preview object identity, and a K-map parameter;
8 updating a K-map conditional upon updating a K-map parameter;
9 displaying in a document pane at least a portion of the current object;
10 displaying in a map pane the K-map; and
11 displaying in a preview pane contents associated with the preview object.

1 **2.** The user interface method as set forth in claim **1**, wherein:
2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map view selector based upon the received user input; and
5 the step of displaying in a map pane the K-map includes selectively displaying
6 one of a tree view and a node view of the K-map based upon the setting of the K-map
7 view selector.

1 **3.** The user interface method as set forth in claim 1, wherein:

2 the step of updating, based upon the received user input, at least one of a current

3 object identity, a preview object identity, and a K-map parameter includes updating a K-

4 map class selector value based upon the received user input; and

5 the step of updating a K-map conditional upon updating a K-map parameter

6 includes updating the K-map to include objects corresponding to the K-map class selector

7 value.

1 **4.** The user interface method as set forth in claim 3, wherein:

2 the step of updating a K-map class selector value includes updating the K-map

3 selector value to correspond to one of a people class, a places class, and a things class

4 based upon the received user input.

1 **5.** The user interface method as set forth in claim 1, wherein:

2 the step of updating, based upon the received user input, at least one of a current

3 object identity, a preview object identity, and a K-map parameter includes updating a K-

4 map scope based upon the received user input; and

5 the step of updating a K-map conditional upon updating a K-map parameter

6 includes updating the K-map to include objects within the K-map scope.

1 **6.** The user interface method as set forth in claim 1, wherein:
2 the step of receiving a user input includes receiving a selection of the current
3 object identity from the user through the K-map pane; and
4 the step of updating a K-map conditional upon updating a K-map parameter
5 includes updating the K-map to include objects related to the current object.

1 **7.** The user interface method as set forth in claim 1, wherein:
2 the step of receiving a user input includes receiving a selection of the preview
3 object identity from the user through the K-map pane.

1 **8.** The user interface method as set forth in claim 1, wherein:
2 the step of receiving a user input includes receiving a text entry through user
3 highlighting of text in the document display pane;
4 the step of updating, based upon the received user input, at least one of a current
5 object identity, a preview object identity, and a K-map parameter includes updating an
6 object K-map parameter to correspond with the received text entry; and
7 the step of updating a K-map conditional upon updating a K-map
8 parameter includes updating the K-map to include objects related to the selected text.

1 **9.** The user interface method as set forth in claim 1, further including:
2 simultaneously displaying the document pane, the map pane, and the preview
3 pane on a single display device.

1 **10.** An apparatus for executing one or more operations in a computer for
2 interfacing an associated user with a knowledge portal operatively associated with a
3 plurality of data objects, the apparatus comprising:
4 a computer having a data store coupled thereto, wherein the data store stores the
5 plurality of data objects; and
6 one or more computer programs, performed by the computer for:
7 receiving a user input,
8 updating, based upon the received user input, at least one of a
9 current object identity, a preview object identity, and a K-map parameter,
10 updating a K-map conditional upon updating a K-map parameter,
11 displaying in a document pane at least a portion of the current
12 object,
13 displaying in a map pane the K-map, and
14 displaying in a preview pane contents associated with the preview
15 object.

1 **11.** The apparatus as set forth in claim **10**, wherein:
2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map view selector based upon the received user input; and
5 the step of displaying in a map pane the K-map includes selectively displaying
6 one of a tree view and a node view of the K-map based upon the setting of the K-map
7 view selector.

1 **12.** The apparatus as set forth in claim **10**, wherein:

2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map class selector value based upon the received user input; and
5 the step of updating a K-map conditional upon updating a K-map parameter
6 includes updating the K-map to include objects corresponding to the K-map class selector
7 value.

1 **13.** The apparatus as set forth in claim **12**, wherein:

2 the step of updating a K-map class selector value includes updating the K-map
3 selector value to correspond to one of a people class, a places class, and a things class
4 based upon the received user input.

1 **14.** The apparatus as set forth in claim **10**, wherein:

2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map scope based upon the received user input; and
5 the step of updating a K-map conditional upon updating a K-map parameter
6 includes updating the K-map to include objects within the K-map scope.

1 **15.** The apparatus as set forth in claim **10**, wherein:

2 the step of receiving a user input includes receiving a selection of the current
3 object identity from the user through the K-map pane; and

4 the step of updating a K-map conditional upon updating a K-map parameter
5 includes updating the K-map to include objects related to the current object.

1 **16.** The apparatus as set forth in claim **10**, wherein:
2 the step of receiving a user input includes receiving a selection of the preview
3 object identity from the user through the K-map pane.

1 **17.** The apparatus as set forth in claim **10**, wherein:
2 the step of receiving a user input includes receiving a text entry supplied through
3 user highlighting of text in the document display pane;
4 the step of updating, based upon the received user input, at least one of a current
5 object identity, a preview object identity, and a K-map parameter includes updating an
6 object K-map parameter to correspond with the received text entry; and
7 the step of updating a K-map conditional upon updating a K-map
8 parameter includes updating the K-map to include objects related to the selected text.

1 **18.** The apparatus as set forth in claim **10**, further including:
2 simultaneously displaying the document pane, the map pane, and the preview
3 pane on a single display device.

1 **19.** An article of manufacture comprising a program storage medium readable
2 by a computer and embodying one or more instructions executable by the computer to
3 perform method steps for executing an operation to perform a user interface method for

4 interfacing an associated user with a knowledge portal operatively associated with a
5 plurality of data objects, the method comprising the steps of:
6 receiving a user input;
7 updating, based upon the received user input, at least one of a current object
8 identity, a preview object identity, and a K-map parameter;
9 updating a K-map conditional upon updating a K-map parameter;
10 displaying in a document pane at least a portion of the current object;
11 displaying in a map pane the K-map; and
12 displaying in a preview pane contents associated with the preview object.

PCT/US2016/035000

1 **20.** The article of manufacture as set forth in claim 19, wherein:
2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map view selector based upon the received user input; and
5 the step of displaying in a map pane the K-map includes selectively displaying
6 one of a tree view and a node view of the K-map based upon the setting of the K-map
7 view selector.

1 **21.** The article of manufacture as set forth in claim 19, wherein:
2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map class selector value based upon the received user input; and

5 the step of updating a K-map conditional upon updating a K-map parameter
6 includes updating the K-map to include objects corresponding to the K-map class selector
7 value.

1 **22.** The article of manufacture as set forth in claim **21**, wherein:
2 the step of updating a K-map class selector value includes updating the K-map
3 selector value to correspond to one of a people class, a places class, and a things class
4 based upon the received user input.

1 **23.** The article of manufacture as set forth in claim **19**, wherein:
2 the step of updating, based upon the received user input, at least one of a current
3 object identity, a preview object identity, and a K-map parameter includes updating a K-
4 map scope based upon the received user input; and
5 the step of updating a K-map conditional upon updating a K-map parameter
6 includes updating the K-map to include objects within the K-map scope.

1 **24.** The article of manufacture as set forth in claim **19**, wherein:
2 the step of receiving a user input includes receiving a selection of the current
3 object identity from the user through the K-map pane; and
4 the step of updating a K-map conditional upon updating a K-map parameter
5 includes updating the K-map to include objects related to the current object.

1 **25.** The article of manufacture as set forth in claim **19**, wherein:

2 the step of receiving a user input includes receiving a selection of the preview
3 object identity from the user through the K-map pane.

1 **26.** The article of manufacture as set forth in claim **19**, wherein:
2 the step of receiving a user input includes receiving a text entry supplied through
3 user highlighting of text in the document display pane;
4 the step of updating, based upon the received user input, at least one of a current
5 object identity, a preview object identity, and a K-map parameter includes updating an
6 object K-map parameter to correspond with the received text entry; and
7 the step of updating a K-map conditional upon updating a K-map
8 parameter includes updating the K-map to include objects related to the selected text.

1 **27.** The user interface method as set forth in claim **19**, further including:
2 simultaneously displaying the document pane, the map pane, and the preview
3 pane on a single display device.

1 **28.** A user interface for interfacing an associated user with a knowledge portal
2 that is operatively associated with a plurality of data objects, the user interface
3 comprising:
4 a means for receiving a user input;
5 a K-map processor for calculating a K-map corresponding to a current object and
6 a set of K-map parameters;
7 a current object display pane for displaying at least a portion of the current object;

8 a K-map display pane for displaying the K-map; and
9 a preview pane for displaying contents corresponding to a preview object.

1 **29.** The user interface as set forth in claim **28**, wherein:
2 the set of K-map parameters includes a view mode parameter;
3 the K-map display pane displays the K-map in a node view conditional upon the
4 view mode parameter corresponding to a node view; and
5 the K-map display pane displays the K-map in a tree view conditional upon the
6 view mode parameter corresponding to a tree view.

1 **30.** The user interface as set forth in claim **28**, wherein:
2 the set of K-map parameters includes a class parameter; and
3 the K-map processor calculates a K-map containing objects limited to objects
4 corresponding to the class parameter.

1 **31.** The user interface as set forth in claim **30**, wherein:
2 the means for receiving a user input include a pointing device selection means
3 operative at least within the K-map display pane; and
4 the class parameter is selectively updateable by the user via the pointing device
5 selection means operating on a graphical class input dialog.

1 **32.** The user interface as set forth in claim **30**, wherein:

2 the class parameter selectively takes values including a people class value, a
3 places class value, and a things class value.

1 **33.** The user interface as set forth in claim **28**, wherein:
2 the set of K-map parameters includes a scope parameter; and
3 the K-map processor calculates a K-map containing objects limited to objects
4 whose relationship to the current object falls within the scope parameter value.

1 **34.** The user interface as set forth in claim **33**, wherein:
2 the means for receiving a user input include a pointing device selection means
3 operative at least within the K-map display pane; and
4 the scope parameter is selectively updateable by the user via the pointing device
5 selection means operating on a graphical scope input dialog.

1 **35.** The user interface as set forth in claim **34**, wherein the graphical scope
2 input dialog is a slider bar.

1 **36.** The user interface as set forth in claim **28**, wherein:
2 the means for receiving a user input include a pointing device selection means
3 operative at least within the K-map display pane; and
4 the current object is selectively updateable by the user via the pointing device
5 selection means operating within the K-map display pane.

1 **37.** The user interface as set forth in claim **28**, wherein:

2 the means for receiving a user input include a pointing device selection means

3 operative at least within the K-map display pane; and

4 the preview object is selectively updateable by the user via the pointing device

5 selection means operating within the K-map display pane.

1 **38.** The user interface as set forth in claim **28**, wherein:

2 the set of K-map parameters includes an object parameter, said object parameter

3 being selectively updateable by the user; and

4 the K-map processor calculates a K-map containing objects related to the object

5 corresponding to the object parameter.

1 **39.** The user interface as set forth in claim **38**, wherein:

2 the means for receiving a user input include a pointing device selection means

3 operative at least within the document display pane whereby the user selectively updates

4 the object parameter by selecting text corresponding thereto from the contents of the

5 document display pane.